

**ABSTRACT OF THE DISCLOSURE**

An intelligent STEP-NC (Standard for the Exchange of Produce model-Numerical Controller) overcomes short-comings of conventional NCs with a closed structure. The intelligent STEP-NC intelligently performs a machining process based on ISO 14649 data while autonomously coping with an emergency at a shop-floor. Thus, the discontinuity of information in a CAD-CAM-CNC chain where the current NCs are operated can be overcome and the concept of "design-to-manufacture" can be realized.